Experiment - 12

Water soaked by Raisins

Q. 1 Resins are soaked in water for determining the percentage of water absorbed by raisins. The formula, used by a student by determining the percentage of water absorbed, is :–

(a) $\dfrac{\text{Initial weight - Final weight}}{\text{Initial weight}} \times 100$

(b) $\dfrac{\text{Final weight - Initial weight}}{\text{Initial weight}} \times 100$

(c) $\dfrac{\text{Final weight - Initial weight}}{\text{Final weight}} \times 100$

(d) $\dfrac{\text{Initial weight - Final weight}}{\text{Final weight}} \times 100$

Q. 2 Ragini soaked 25gm of raisins in 125ml of distilled water in beakers A and B each. She maintained beaker A at 25°C and beaker B at 50°C. After two hours the percentage of water absorbed will be :–

(a) same in A and B

(b) more in A then in B

(c) more in B then in A

(d) exactly twice as much in B as in A

Q. 3 What is the inference drawn from the experiment to determine the percentage of water absorbed by raisins.

(a) distilled water enter raisins because of endosmosis

(b) distilled water enter in raisins due to exosmosis

(c) water moves out of raisins due to endosmosis

(d) water moves out of raisins due to exosmosis

Q. 4 The percentage of water absorbed by raisins is

(a) equal to weight to dry raisins

(b) directly proportional to weight of dry raisins.

(c) inversely proportional to weight of dry raisins

(d) none of the above.

Q. 5 The excess water from soaked raisins is removed by
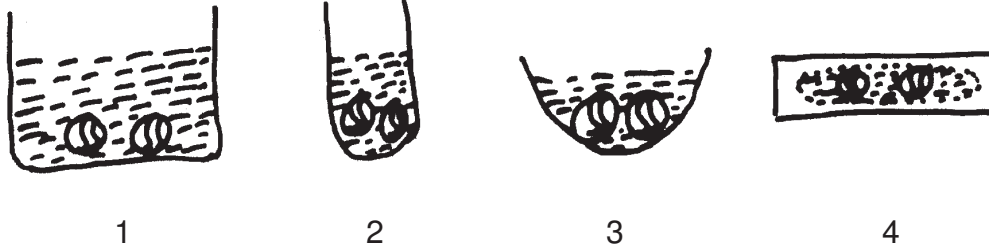
(a) cotton

(b) rubbing the raisins by palm

(c) filter paper

(d) blowing through mouth

Q. 6   The incorrect method soaking raisins in water is :–

              1   2   3   4

(a) 3   (b) 4

(c) 1   (d) 2

Q. 7   Parveen performed the experiment to determine percentage of water absorbed by raisins. The initial weight of raisins is 15gms and final weight is 24gms. The percentage of water absorbed will be :–

(a) 62.5%   (b) 160%

(c) 60%   (d) 20%

Q. 8   The colour of raisins after soaking them in water becomes :–

(a) darker   (b) colourless

(c) does not change   (d) some becomes light

Q. 9   Equal amount of raisins were put in water as shown in the diagram given below for half an hour. Identify the case in which maximum absorption of water will be seen.

        Fresh water   **dilute sugar**   **concentrated**
                                solution   **sugar solution**
            1   2   3

(a) 1   (b) 2

(c) 3   (d) same on all three cases

Experiment - 13

Types of Reaction

Q. 1   Action of water on quick lime is a

(a) Decomposition reaction   (b) Combination reaction

(c) Displacement reaction   (d) Double displacement reaction

Q. 2   Chemical formula of quick lime is

(a) $CaCl_2$ (b) $CaCO_3$

(c) CaO (d) $Ca(OH)_2$

Q. 3   This reaction is an example of :–

$$CaO + H_2O \rightarrow Ca(OH)_2$$

(a) Endothermic   (b) Exothermic

(c) Substitution reaction   (d) none of these

Q. 4   On passing CO_2 gas through the product formed by the reaction between CaO and H_2O, solution becomes

(a) Red   (b) Pink

(c) Black   (d) White

Q. 5   Which of the following information about the reaction of CaO and water is not true :–

(a) CaO reacts with water to form slaked lime

(b) CaO reacts with water vigorously

(c) During the reaction the test tube becomes cold

(d) during the reaction the test tube becomes hot

Q. 6   The solution obtained by mixing CaO with water will be a

(a) Acidic solution   (b) Neutral solution

(c) Basic soution   (d) Emphoteric solution

Q. 7 Heating of ferrous sulphate is a reaction called

(a) Displacement reaction   (b) Combination reaction

(c) Decomposition reaction   (d) Double displacement reaction

Q. 8 Colour of ferrous sulphate is

(a) Blue   (b) Pale green

(c) Brown   (d) Grey

Q. 9 When ferrous sulphate is heated its colour changes

(a) pale green to light red   (b) blue to white

(c) brown to black   (d) blue to yellow

Q. 10 The products obtained by the heating of ferrous sulphate are

(a) SO_2, FeO   (b) SO_3, SO_2, Fe_2O_3

(c) SO_3, SO_2, FeO   (d) SO_3, Fe_2O_3

Q. 11 When ferrous sulphate (solid) is heated in a glass tube, a solid remained in the glass tube is

(a) ferrous sulphide   (b) ferric oxide

(c) ferrous oxide   (d) ferrous sulphite

Q. 12 When an iron nail is placed in a copper sulphate solution, its colour changes from

(a) blue to pale green   (b) brown to black

(c) blue to colourless   (d) pale green to milky white

Q. 13 An iron nail is placed in a copper sulphate solution. After ten minutes nail is taken out. The nail is found coated with :–

(a) black deposit   (b) brown deposit

(c) white deposit   (d) yellow deposit

Q. 14 Displacement of copper from its solution by iron nail shows :–

(a) copper is more reactive than iron

(b) iron is more reactive than copper

(c) both are equally reactive

(d) none of the above

Q. 15 Precipitate formed by the reaction of Barium Chloride and sodium sulphate is :–

(a) sodium chloride   (b) barrium sulphate

(c) barrium sulphite   (d) sodium sulphite

Q. 16 The colour of precipitate formed by the action of barium chloride and sodium sulphate is

(a) white   (b) pale green

(c) blue   (d) yellow

Q. 17 Which of the following reaction represents the reaction between barrium chloride and sodium sulphate correctly?

(a) $NaSO_4 + BaCl_2 \rightarrow BaSO_4 + NaCl$ (b) $Na_2SO_4 + BaCl \rightarrow BaSO_4 + NaCl$

(c) $Na_2SO_4 + BaCl_2 \rightarrow BaSO_4 + 2NaCl$ (d) $NaSO_4 + BaCl \rightarrow BaSO_4 + NaCl$